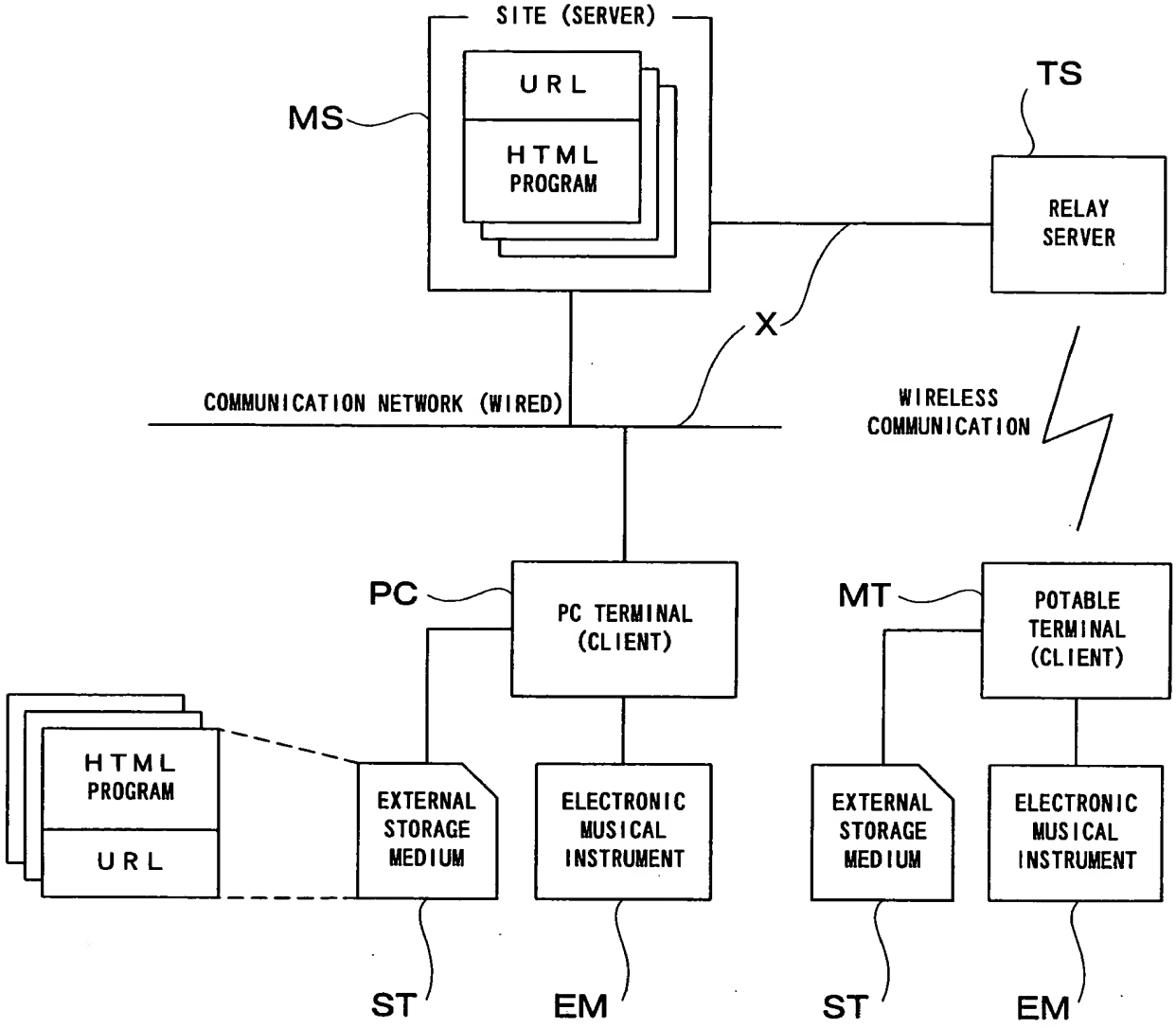

SITE (SERVER)
URL
HTML PROGRAM
MS
TS
RELAY SERVER
X
COMMUNICATION NETWORK (WIRED)
WIRELESS COMMUNICATION
PC
PC TERMINAL (CLIENT)
MT
POTABLE TERMINAL (CLIENT)
HTML PROGRAM
URL
EXTERNAL STORAGE MEDIUM
ELECTRONIC MUSICAL INSTRUMENT
EXTERNAL STORAGE MEDIUM
ELECTRONIC MUSICAL INSTRUMENT
ST
EM
ST
EM

FIG. 1

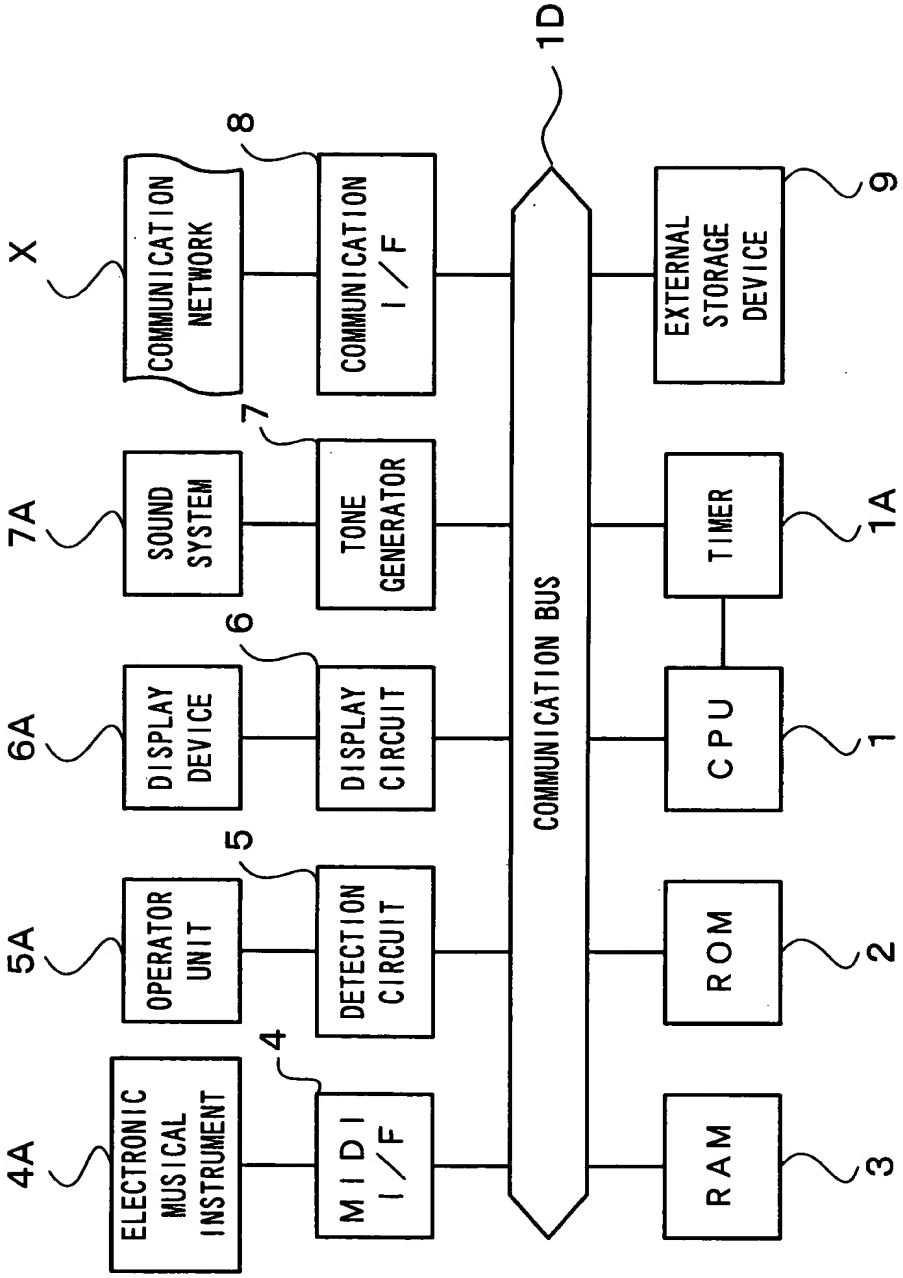

4A
ELECTRONIC MUSICAL INSTRUMENT
4
MIDI I/F
5A
OPERATOR UNIT
5
DETECTION CIRCUIT
6A
DISPLAY DEVICE
6
DISPLAY CIRCUIT
7A
SOUND SYSTEM
7
TONE GENERATOR
X
COMMUNICATION NETWORK
8
COMMUNICATION I/F
1D
COMMUNICATION BUS
RAM
3
ROM
2
CPU
1
TIMER
1A
EXTERNAL STORAGE DEVICE
9

FIG. 2

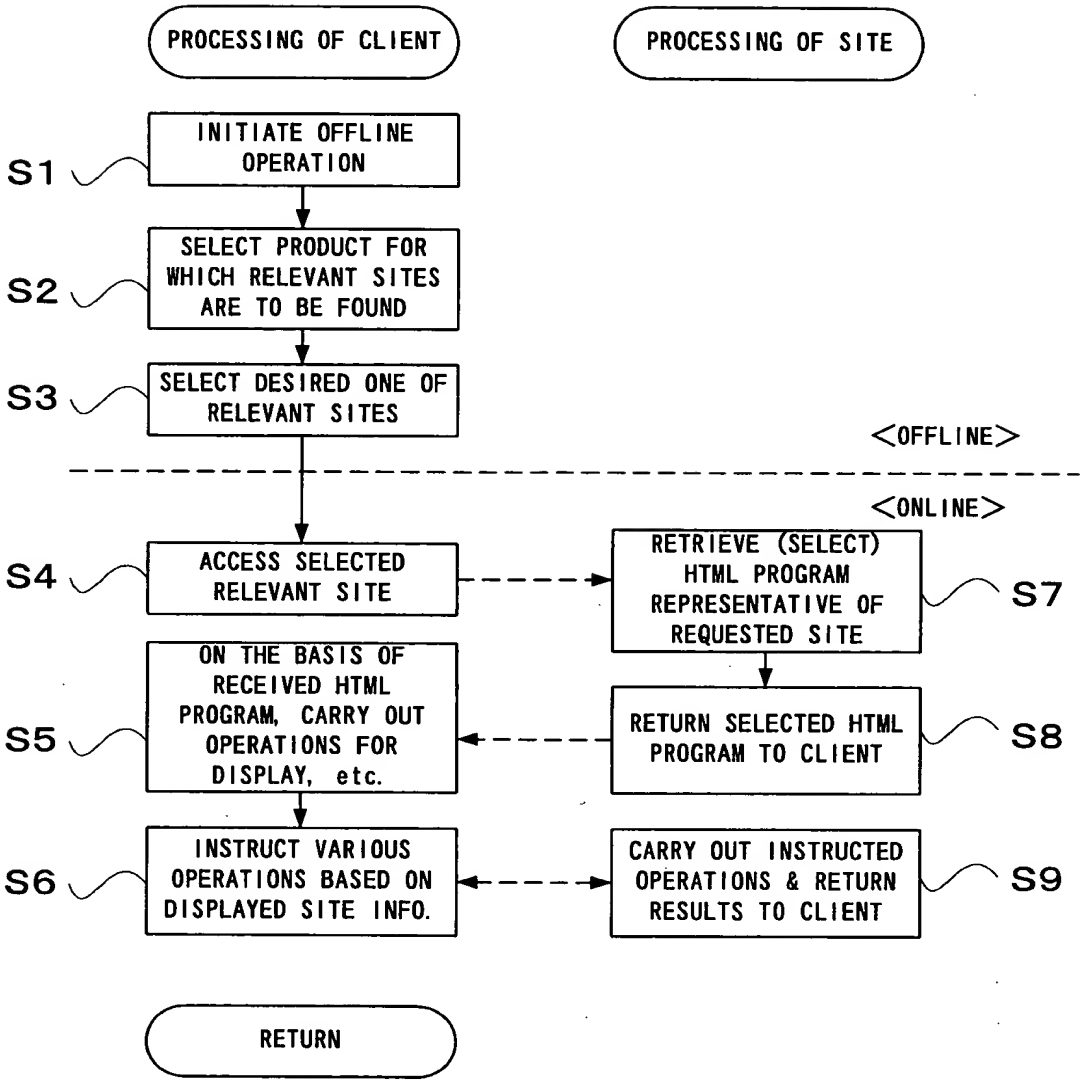

PROCESSING OF CLIENT
PROCESSING OF SITE
INITIATE OFFLINE OPERATION
S1
SELECT PRODUCT FOR WHICH RELEVANT SITES ARE TO BE FOUND
S2
SELECT DESIRED ONE OF RELEVANT SITES
S3
<OFFLINE>
<ONLINE>
ACCESS SELECTED RELEVANT SITE
S4
RETRIEVE (SELECT) HTML PROGRAM REPRESENTATIVE OF REQUESTED SITE
S7
ON THE BASIS OF RECEIVED HTML PROGRAM, CARRY OUT OPERATIONS FOR DISPLAY, etc.
S5
RETURN SELECTED HTML PROGRAM TO CLIENT
S8
INSTRUCT VARIOUS OPERATIONS BASED ON DISPLAYED SITE INFO.
S6
CARRY OUT INSTRUCTED OPERATIONS & RETURN RESULTS TO CLIENT
S9
RETURN

FIG. 3

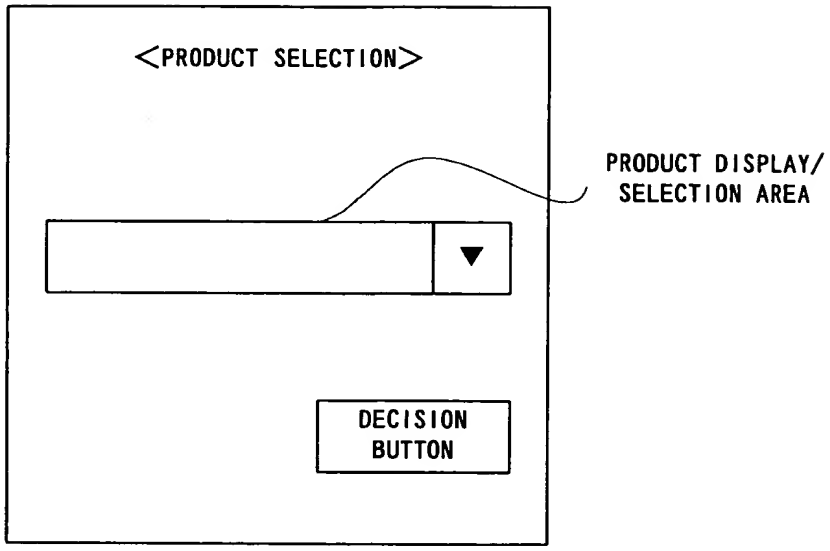


FIG. 4

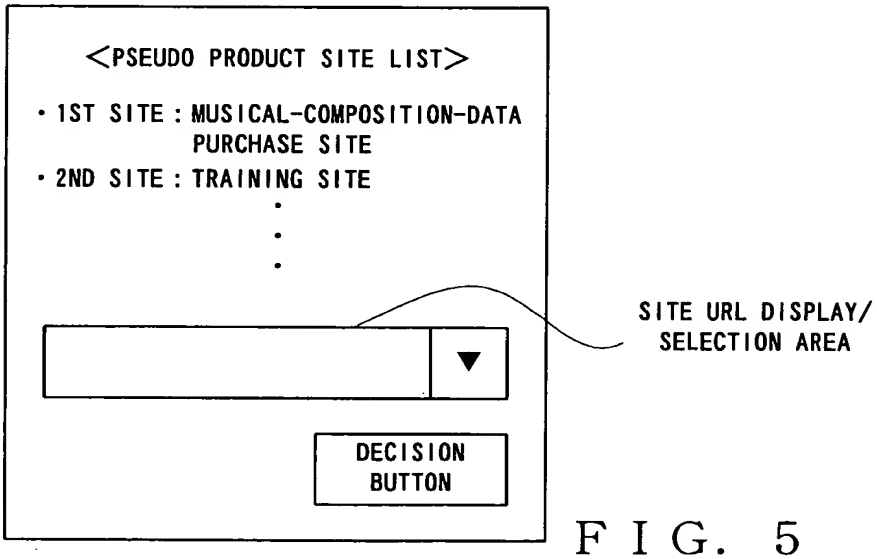


FIG. 5

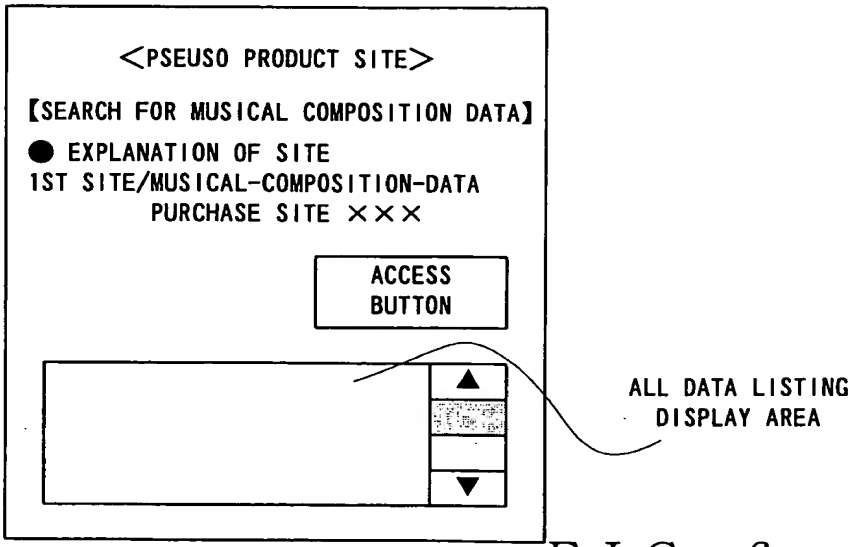


FIG. 6

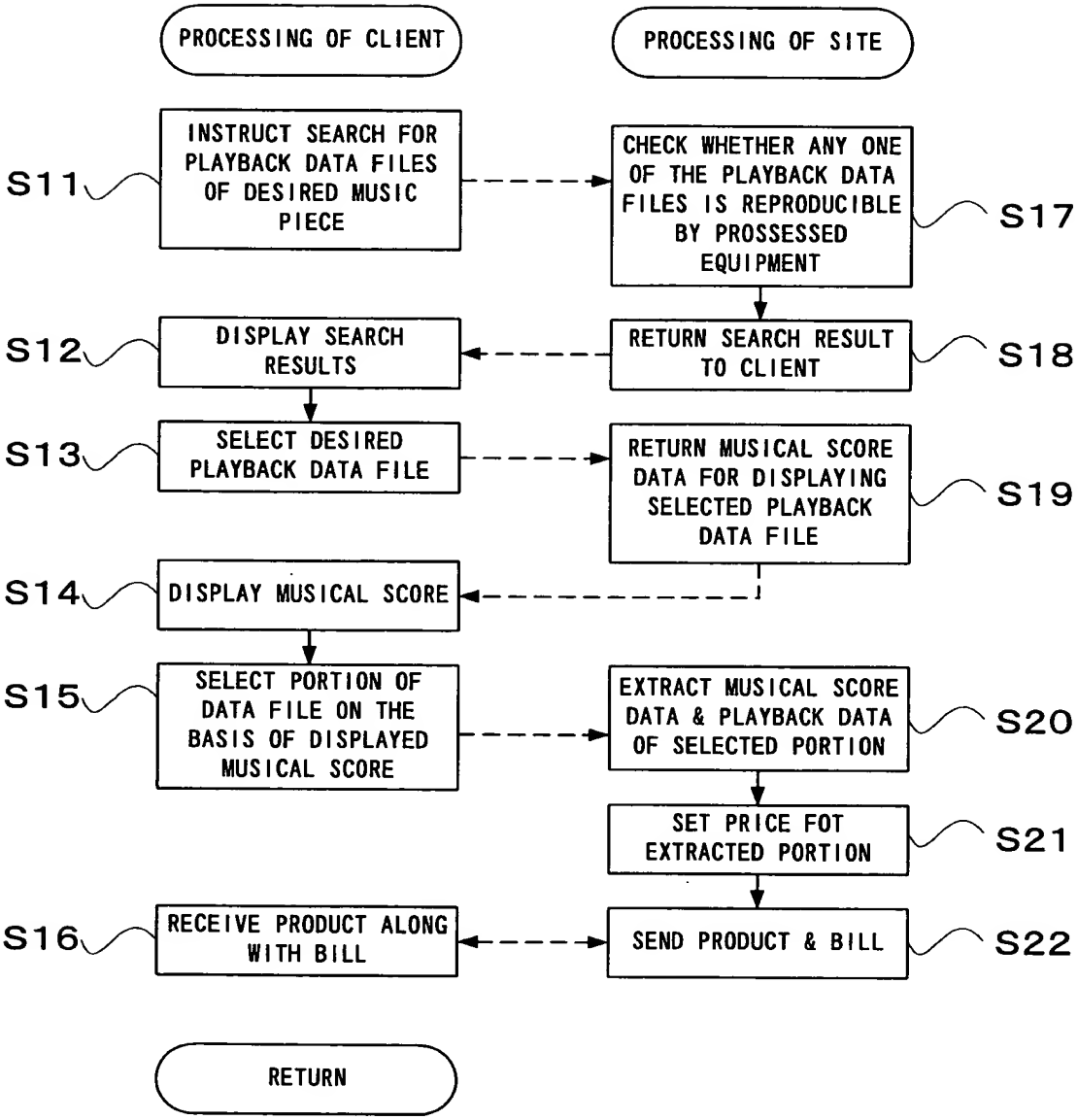

PROCESSING OF CLIENT
PROCESSING OF SITE
S11
INSTRUCT SEARCH FOR PLAYBACK DATA FILES OF DESIRED MUSIC PIECE
CHECK WHETHER ANY ONE OF THE PLAYBACK DATA FILES IS REPRODUCIBLE BY PROSSESSED EQUIPMENT
S17
S12
DISPLAY SEARCH RESULTS
RETURN SEARCH RESULT TO CLIENT
S18
S13
SELECT DESIRED PLAYBACK DATA FILE
RETURN MUSICAL SCORE DATA FOR DISPLAYING SELECTED PLAYBACK DATA FILE
S19
S14
DISPLAY MUSICAL SCORE
S15
SELECT PORTION OF DATA FILE ON THE BASIS OF DISPLAYED MUSICAL SCORE
EXTRACT MUSICAL SCORE DATA & PLAYBACK DATA OF SELECTED PORTION
S20
SET PRICE FOT EXTRACTED PORTION
S21
S16
RECEIVE PRODUCT ALONG WITH BILL
SEND PRODUCT & BILL
S22
RETURN

FIG. 7

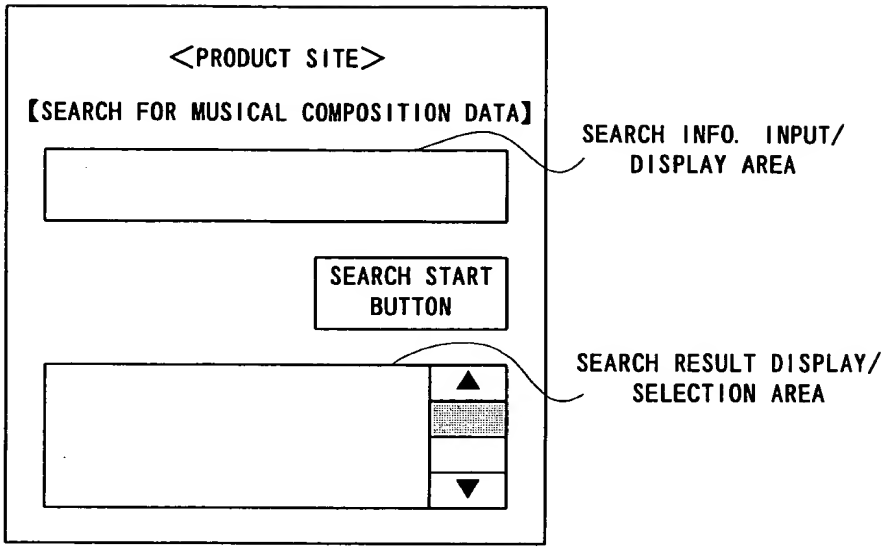

<PRODUCT SITE>
【SEARCH FOR MUSICAL COMPOSITION DATA】
SEARCH INFO. INPUT/ DISPLAY AREA
SEARCH START BUTTON
SEARCH RESULT DISPLAY/ SELECTION AREA

FIG. 8

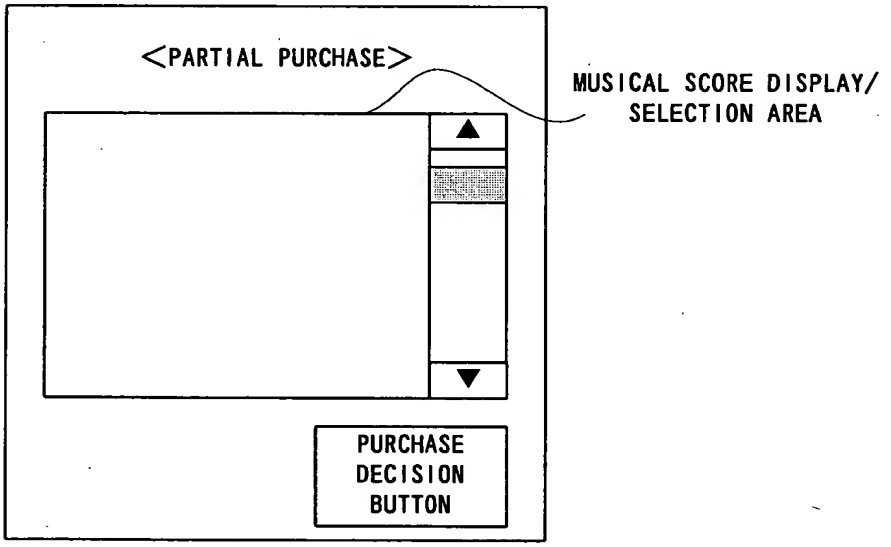

<PARTIAL PURCHASE>
MUSICAL SCORE DISPLAY/ SELECTION AREA
PURCHASE DECISION BUTTON

FIG. 9

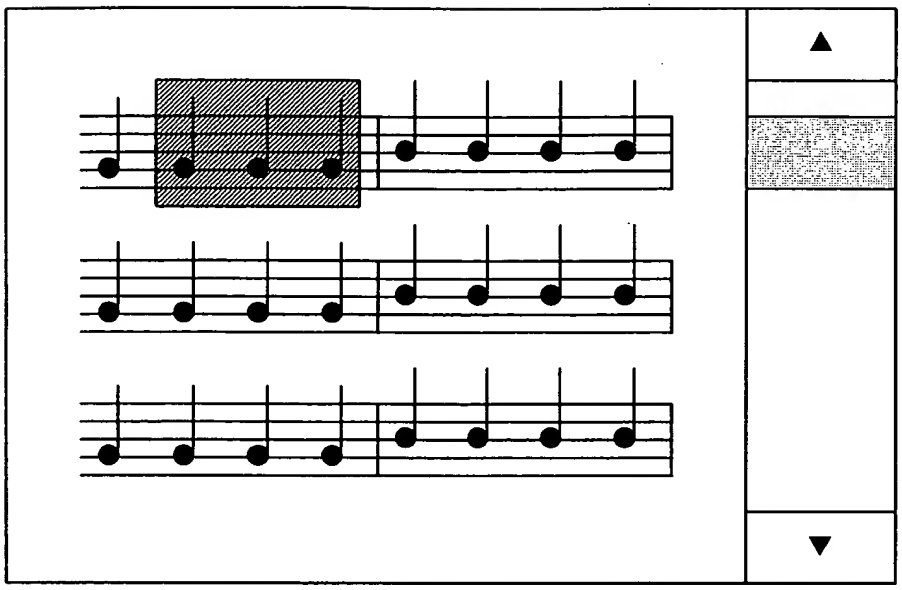


FIG. 10

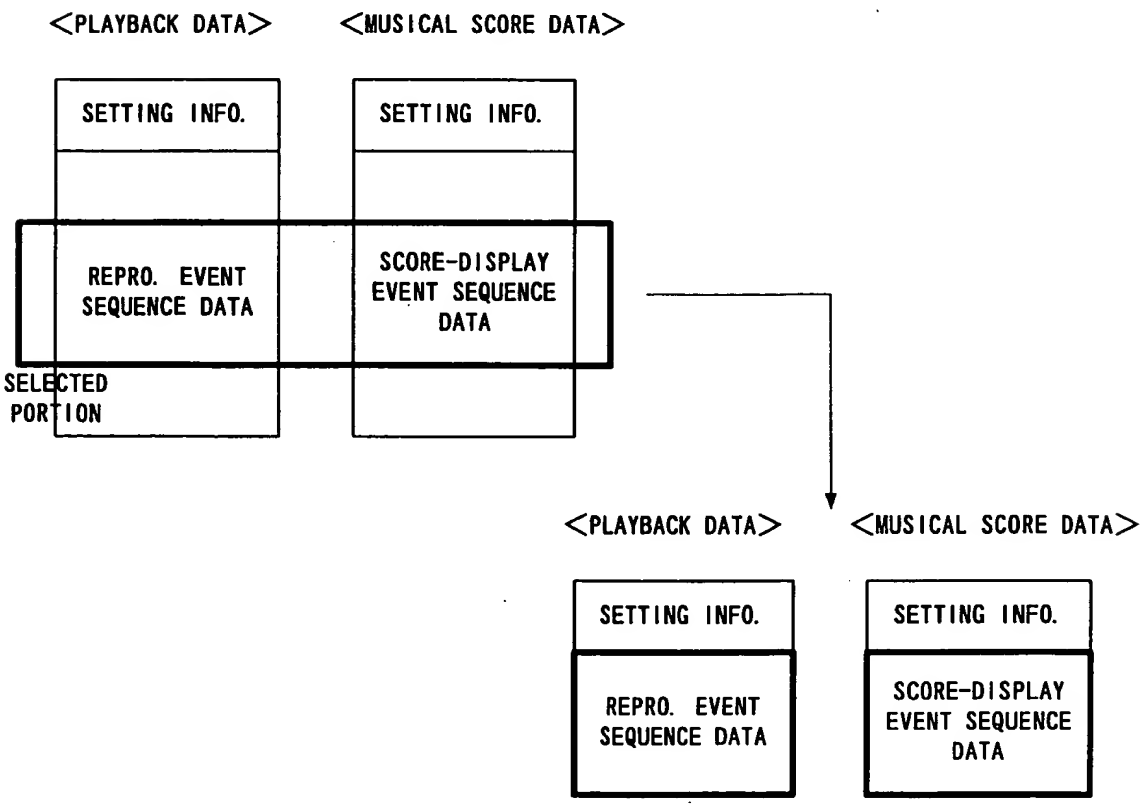

<PLAYBACK DATA>
<MUSICAL SCORE DATA>
SETTING INFO.
SETTING INFO.
REPRO. EVENT SEQUENCE DATA
SCORE-DISPLAY EVENT SEQUENCE DATA
SELECTED PORTION
<PLAYBACK DATA>
<MUSICAL SCORE DATA>
SETTING INFO.
SETTING INFO.
REPRO. EVENT SEQUENCE DATA
SCORE-DISPLAY EVENT SEQUENCE DATA

FIG. 11

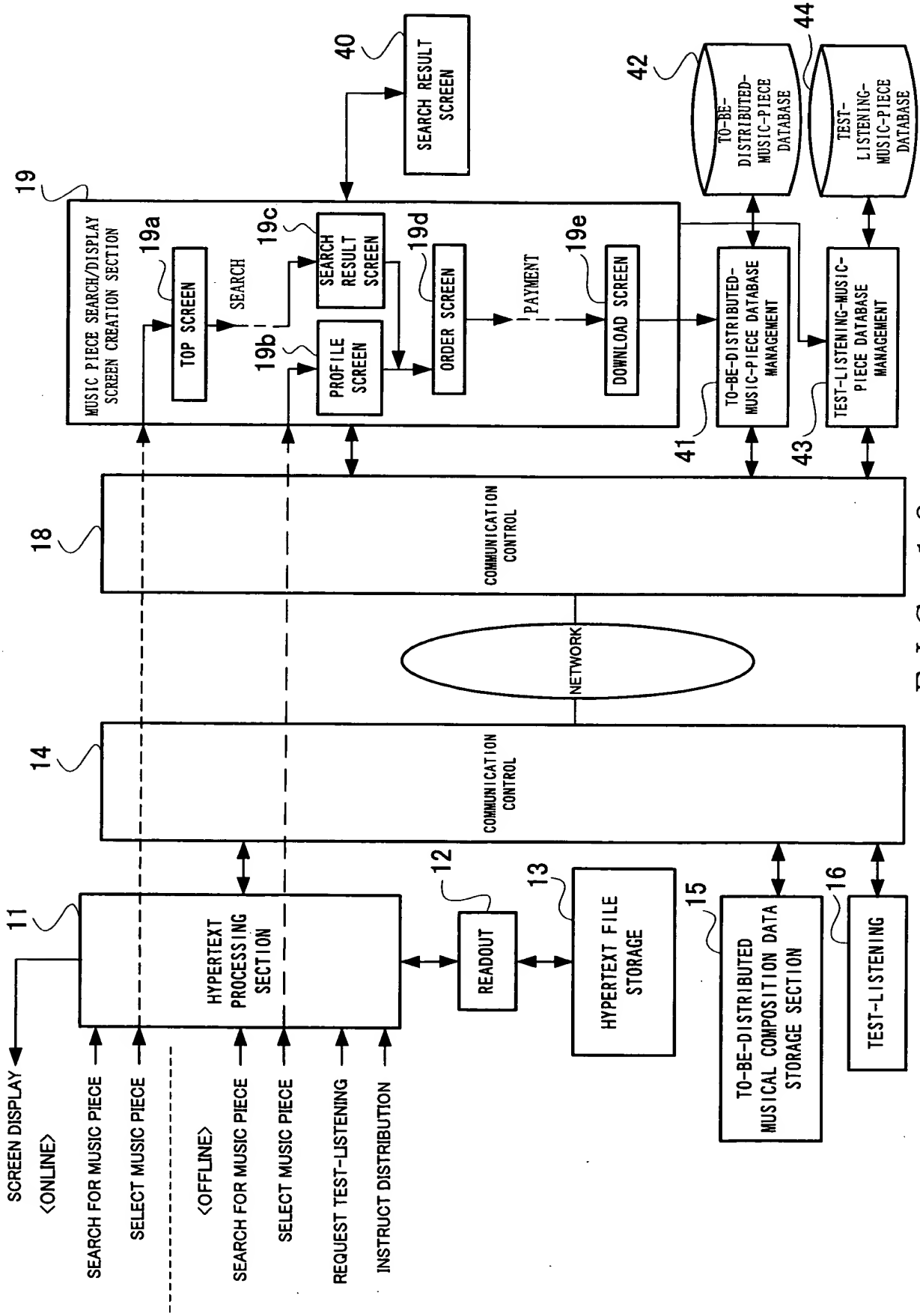

SCREEN DISPLAY
<ONLINE>
SEARCH FOR MUSIC PIECE
SELECT MUSIC PIECE
<OFFLINE>
SEARCH FOR MUSIC PIECE
SELECT MUSIC PIECE
REQUEST TEST-LISTENING
INSTRUCT DISTRIBUTION
11
HYPERTEXT PROCESSING SECTION
12
READOUT
13
HYPERTEXT FILE STORAGE
14
COMMUNICATION CONTROL
15
TO-BE-DISTRIBUTED MUSICAL COMPOSITION DATA STORAGE SECTION
16
TEST-LISTENING
NETWORK
18
COMMUNICATION CONTROL
19
MUSIC PIECE SEARCH/DISPLAY SCREEN CREATION SECTION
19a
TOP SCREEN
SEARCH
19b
PROFILE SCREEN
19c
SEARCH RESULT SCREEN
19d
ORDER SCREEN
PAYMENT
19e
DOWNLOAD SCREEN
40
SEARCH RESULT SCREEN
41
TO-BE-DISTRIBUTED-MUSIC-PIECE DATABASE MANAGEMENT
42
TO-BE-DISTRIBUTED-MUSIC-PIECE DATABASE
43
TEST-LISTENING-MUSIC-PIECE DATABASE MANAGEMENT
44
TEST-LISTENING-MUSIC-PIECE DATABASE

FIG. 12

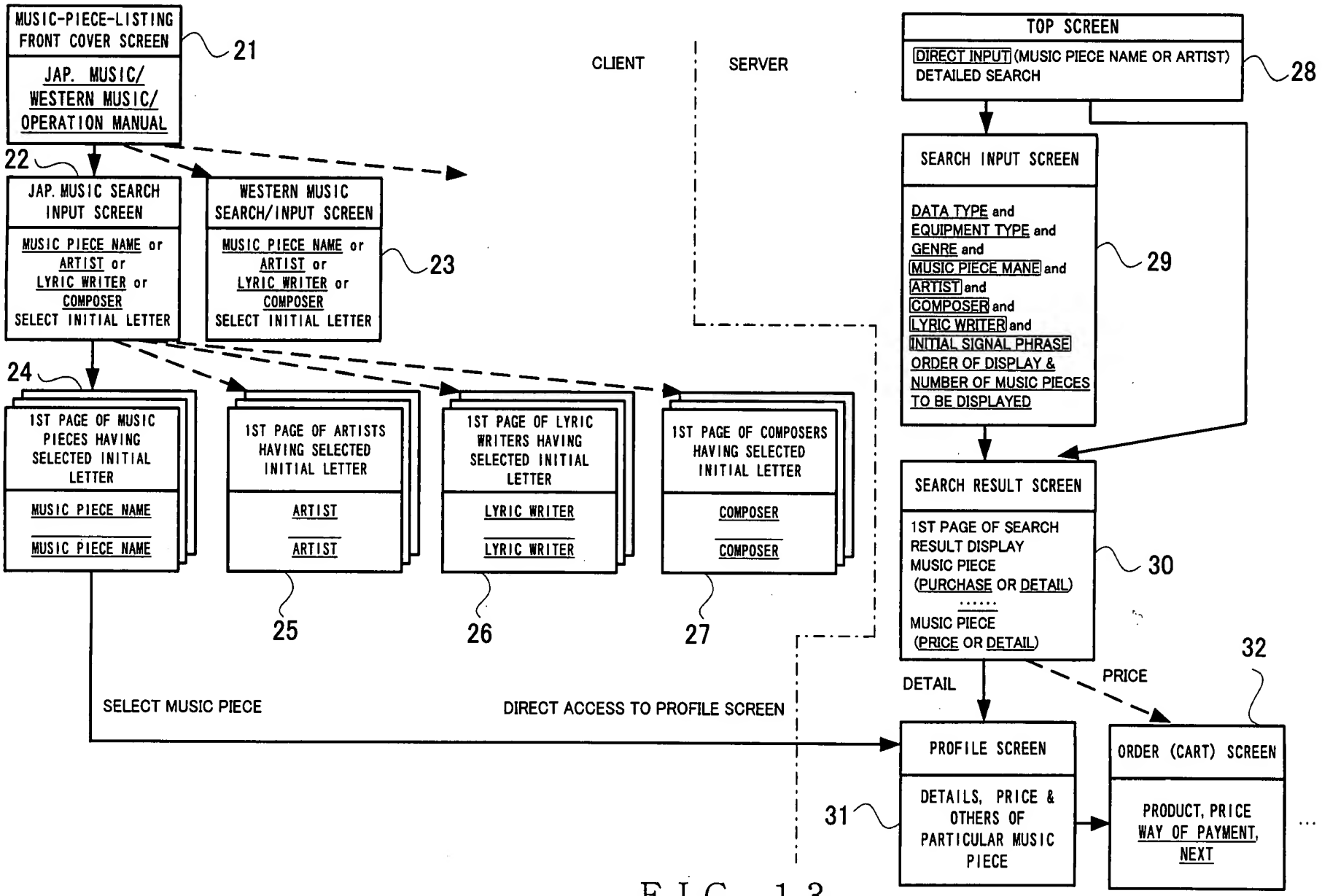

MUSIC-PIECE-LISTING FRONT COVER SCREEN
JAP. MUSIC/ WESTERN MUSIC/ OPERATION MANUAL
21
CLIENT
SERVER
22
JAP. MUSIC SEARCH INPUT SCREEN
MUSIC PIECE NAME or ARTIST or LYRIC WRITER or COMPOSER SELECT INITIAL LETTER
WESTERN MUSIC SEARCH/INPUT SCREEN
MUSIC PIECE NAME or ARTIST or LYRIC WRITER or COMPOSER SELECT INITIAL LETTER
23
SEARCH INPUT SCREEN
DATA TYPE and EQUIPMENT TYPE and GENRE and MUSIC PIECE MANE and ARTIST and COMPOSER and LYRIC WRITER and INITIAL SIGNAL PHRASE ORDER OF DISPLAY & NUMBER OF MUSIC PIECES TO BE DISPLAYED
29
24
1ST PAGE OF MUSIC PIECES HAVING SELECTED INITIAL LETTER
MUSIC PIECE NAME
MUSIC PIECE NAME
1ST PAGE OF ARTISTS HAVING SELECTED INITIAL LETTER
ARTIST
ARTIST
1ST PAGE OF LYRIC WRITERS HAVING SELECTED INITIAL LETTER
LYRIC WRITER
LYRIC WRITER
1ST PAGE OF COMPOSERS HAVING SELECTED INITIAL LETTER
COMPOSER
COMPOSER
25
26
27
SEARCH RESULT SCREEN
1ST PAGE OF SEARCH RESULT DISPLAY MUSIC PIECE (PURCHASE OR DETAIL)
.....
MUSIC PIECE (PRICE OR DETAIL)
30
32
DETAIL
PRICE
SELECT MUSIC PIECE
DIRECT ACCESS TO PROFILE SCREEN
PROFILE SCREEN
DETAILS, PRICE & OTHERS OF PARTICULAR MUSIC PIECE
31
ORDER (CART) SCREEN
PRODUCT, PRICE WAY OF PAYMENT, NEXT

FIG. 13

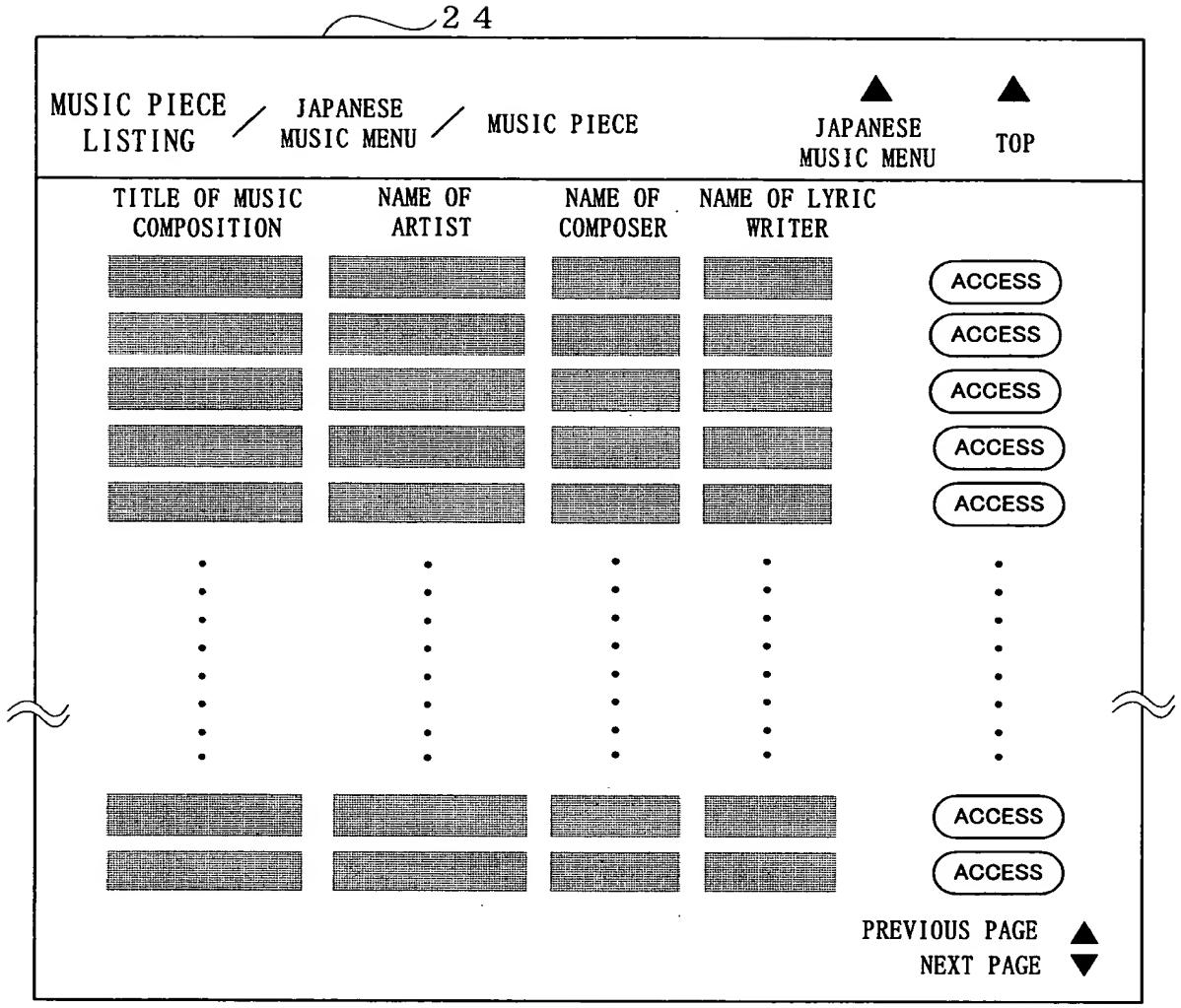

24
MUSIC PIECE LISTING
JAPANESE MUSIC MENU
MUSIC PIECE
JAPANESE MUSIC MENU
TOP
TITLE OF MUSIC COMPOSITION
NAME OF ARTIST
NAME OF COMPOSER
NAME OF LYRIC WRITER
ACCESS
ACCESS
ACCESS
ACCESS
ACCESS
ACCESS
ACCESS
PREVIOUS PAGE
NEXT PAGE

FIG. 14

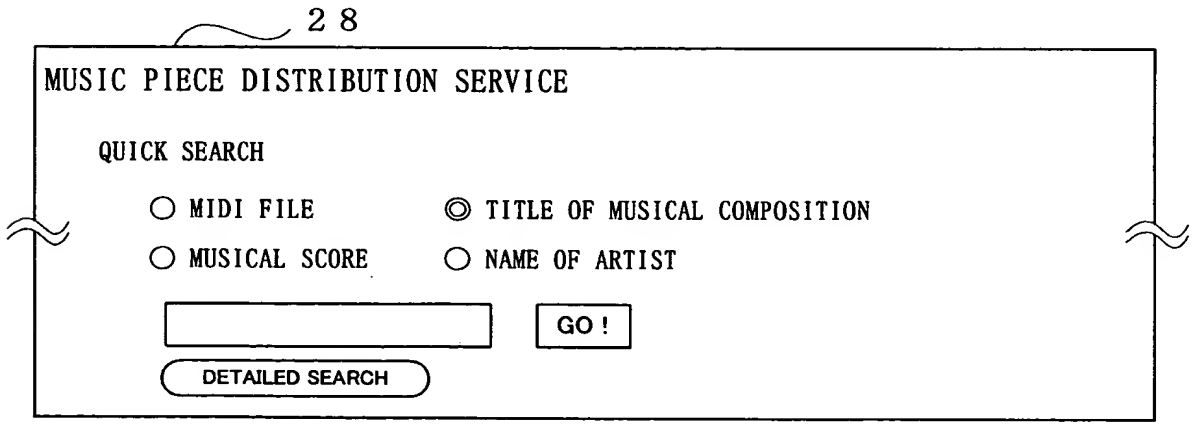

28
MUSIC PIECE DISTRIBUTION SERVICE
QUICK SEARCH
MIDI FILE
TITLE OF MUSICAL COMPOSITION
MUSICAL SCORE
NAME OF ARTIST
GO !
DETAILED SEARCH

FIG. 15

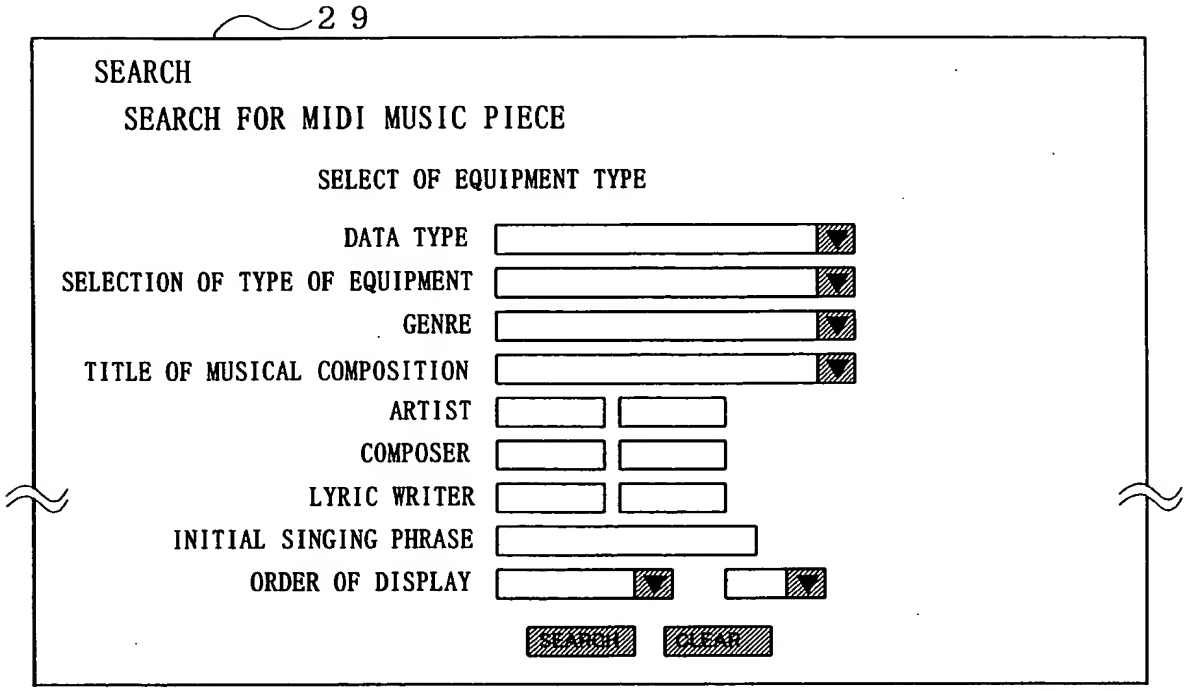


FIG. 16A

DATA TYPE
DATA FOR KARAOKE
DATA FOR GUITAR
DATA FOR ELECTRONIC PIANO
DATA FOR PORTABLE KEYBOARD
DATA FOR ALL XG T.G.
DATA DEDICATED TO PARTICULAR T.G. (MODEL A)
DATA DEDICATED TO PARTICULAR T.G. (MODEL A + PLUG-IN B)
DATA DEDICATED TO PARTICULAR T.G. (MODEL A + PLUG-IN C)
DATA DEDICATED TO PARTICULAR T.G. (MODEL A + PLUG-IN D)
DATA DEDICATED TO PARTICULAR T.G. (MEDEL E)

FIG. 16B

SELECTION OF TYPE OF PORTABLE KEYBOARD
MODEL F
MODEL G
MODEL H
MODEL I

FIG. 16C

SELECTION OF GENRE
CLASSICA MUSIC
ROCK,POPS
FOLK,COUNTRY
EASY LISTENING
JAZZ,FUSION
TECHNO
JAPANESE POPS
ANIMATION,MUSIC FOR CHILDREN

FIG. 16D

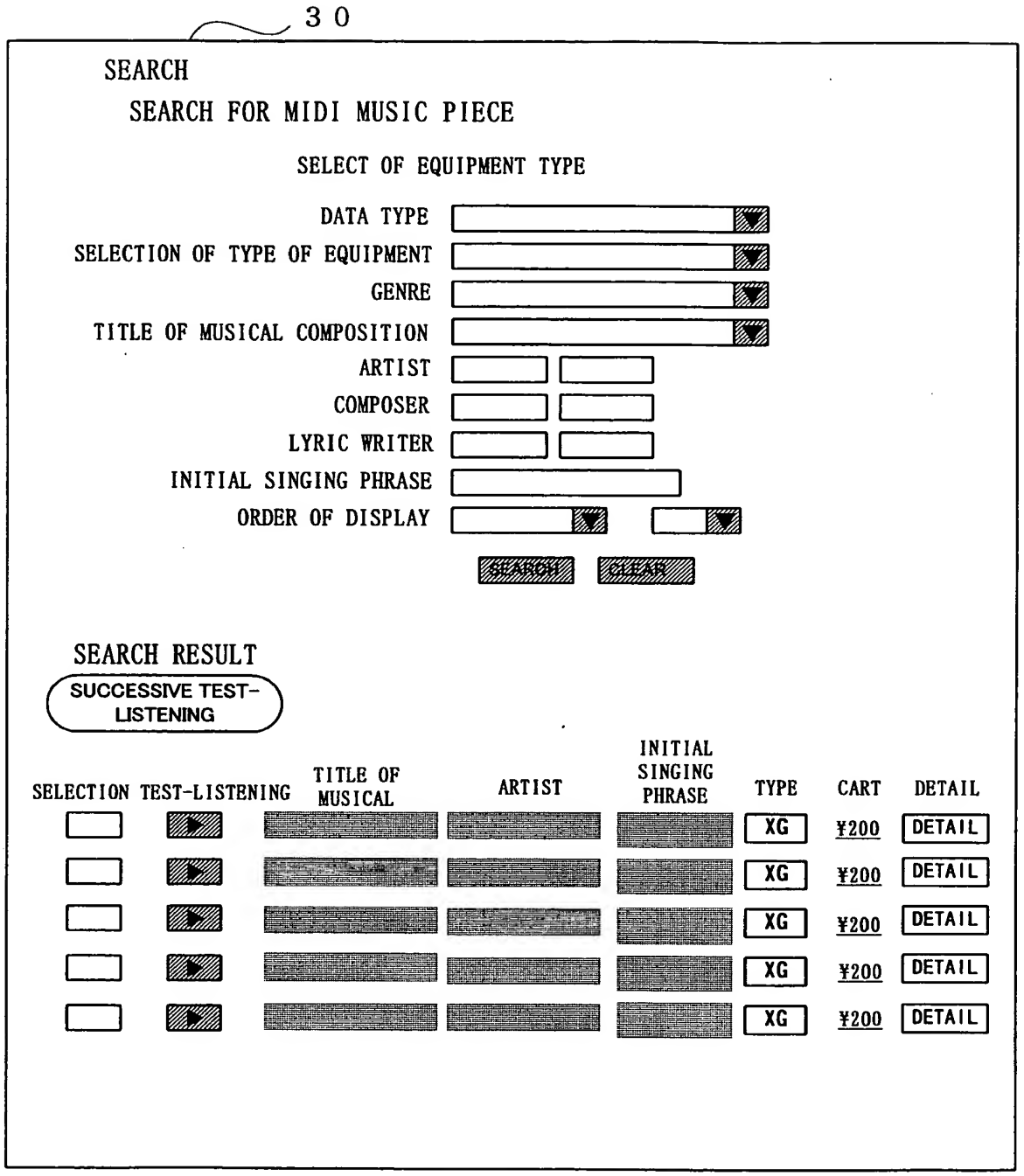

30
SEARCH
SEARCH FOR MIDI MUSIC PIECE
SELECT OF EQUIPMENT TYPE
DATA TYPE
SELECTION OF TYPE OF EQUIPMENT
GENRE
TITLE OF MUSICAL COMPOSITION
ARTIST
COMPOSER
LYRIC WRITER
INITIAL SINGING PHRASE
ORDER OF DISPLAY
SEARCH
CLEAR
SEARCH RESULT
SUCCESSIVE TEST-LISTENING
SELECTION
TEST-LISTENING
TITLE OF MUSICAL
ARTIST
INITIAL SINGING PHRASE
TYPE
CART
DETAIL
XG
¥200
DETAIL

FIG. 17

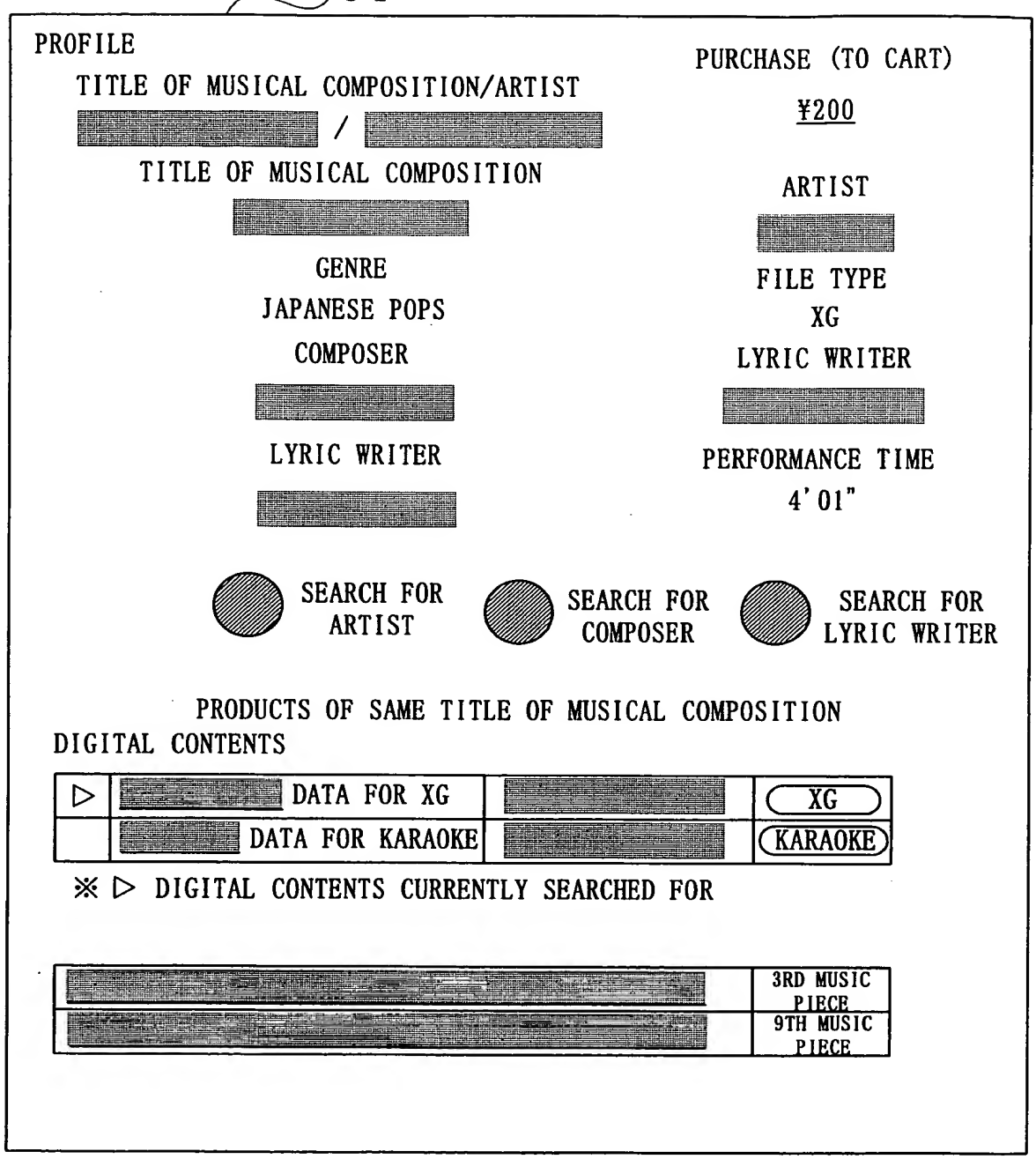

31
PROFILE
TITLE OF MUSICAL COMPOSITION/ARTIST
/
TITLE OF MUSICAL COMPOSITION
GENRE
JAPANESE POPS
COMPOSER
LYRIC WRITER
PURCHASE (TO CART)
¥200
ARTIST
FILE TYPE
XG
LYRIC WRITER
PERFORMANCE TIME
4'01"
SEARCH FOR ARTIST
SEARCH FOR COMPOSER
SEARCH FOR LYRIC WRITER
PRODUCTS OF SAME TITLE OF MUSICAL COMPOSITION
DIGITAL CONTENTS
DATA FOR XG
XG
DATA FOR KARAOKE
KARAOKE
※ ▷ DIGITAL CONTENTS CURRENTLY SEARCHED FOR
3RD MUSIC PIECE
9TH MUSIC PIECE

FIG. 18

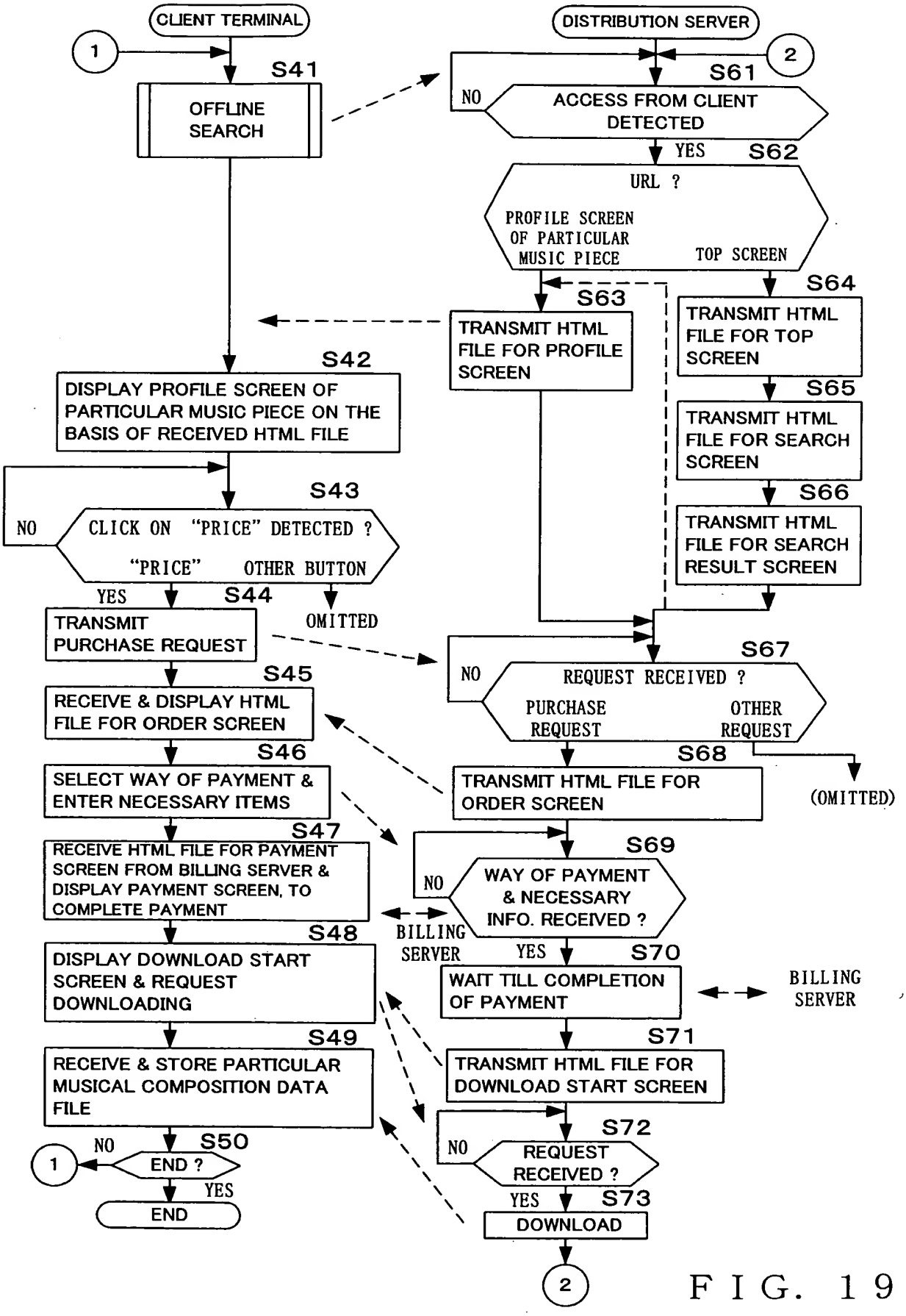

CLIENT TERMINAL
DISTRIBUTION SERVER
1
2
S41
OFFLINE SEARCH
S61
NO
ACCESS FROM CLIENT DETECTED
YES
S62
URL ?
PROFILE SCREEN OF PARTICULAR MUSIC PIECE
TOP SCREEN
S63
TRANSMIT HTML FILE FOR PROFILE SCREEN
S64
TRANSMIT HTML FILE FOR TOP SCREEN
S65
TRANSMIT HTML FILE FOR SEARCH SCREEN
S66
TRANSMIT HTML FILE FOR SEARCH RESULT SCREEN
S42
DISPLAY PROFILE SCREEN OF PARTICULAR MUSIC PIECE ON THE BASIS OF RECEIVED HTML FILE
S43
NO
CLICK ON "PRICE" DETECTED ?
"PRICE"
OTHER BUTTON
YES
S44
OMITTED
TRANSMIT PURCHASE REQUEST
S67
NO
REQUEST RECEIVED ?
PURCHASE REQUEST
OTHER REQUEST
S45
RECEIVE & DISPLAY HTML FILE FOR ORDER SCREEN
S68
TRANSMIT HTML FILE FOR ORDER SCREEN
(OMITTED)
S46
SELECT WAY OF PAYMENT & ENTER NECESSARY ITEMS
S47
RECEIVE HTML FILE FOR PAYMENT SCREEN FROM BILLING SERVER & DISPLAY PAYMENT SCREEN, TO COMPLETE PAYMENT
S69
NO
WAY OF PAYMENT & NECESSARY INFO. RECEIVED ?
BILLING SERVER
YES
S70
WAIT TILL COMPLETION OF PAYMENT
BILLING SERVER
S48
DISPLAY DOWNLOAD START SCREEN & REQUEST DOWNLOADING
S71
TRANSMIT HTML FILE FOR DOWNLOAD START SCREEN
S49
RECEIVE & STORE PARTICULAR MUSICAL COMPOSITION DATA FILE
S72
NO
REQUEST RECEIVED ?
YES
S73
DOWNLOAD
S50
NO
END ?
YES
END
1
2

FIG. 19

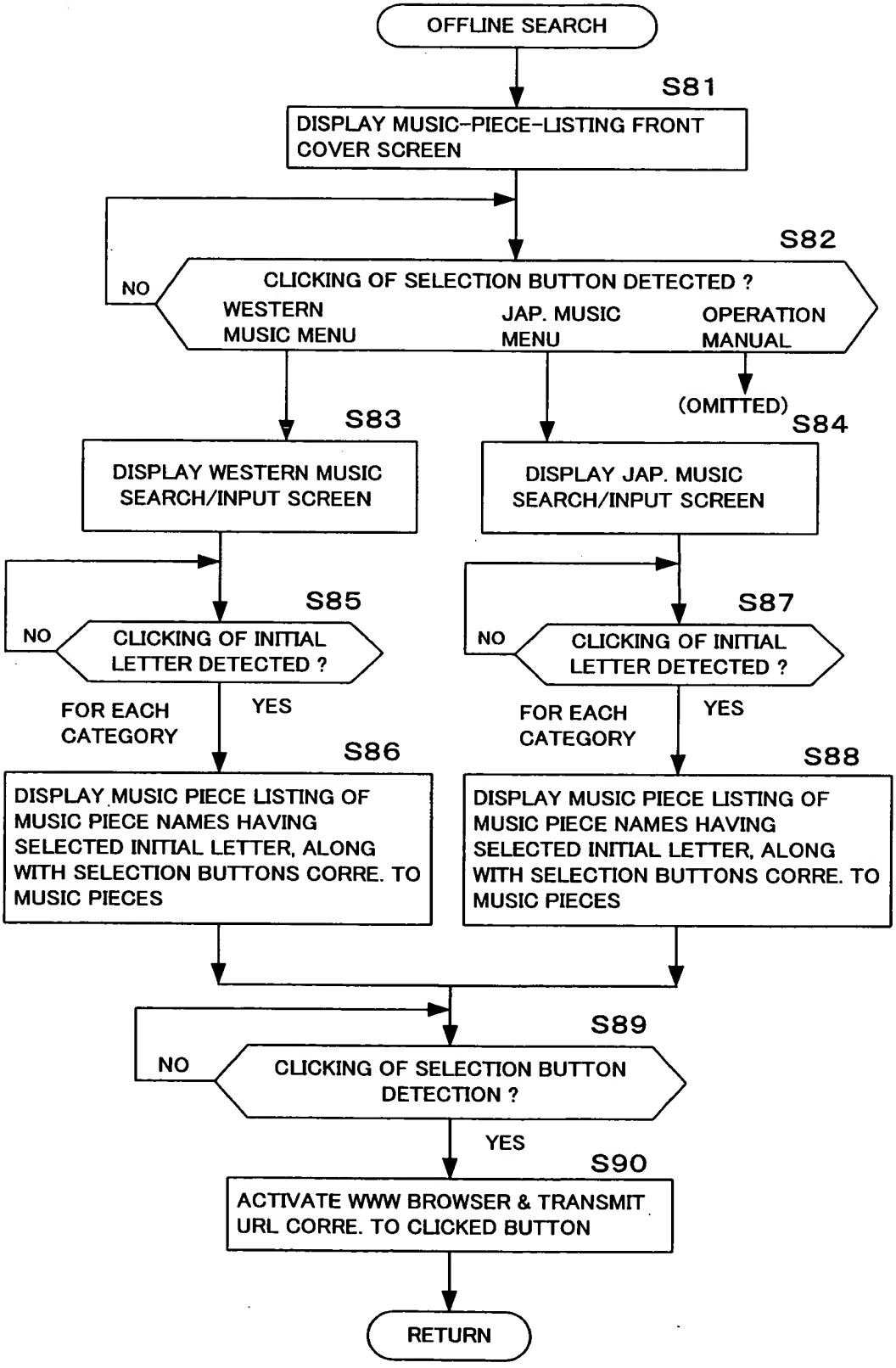

OFFLINE SEARCH
S81
DISPLAY MUSIC-PIECE-LISTING FRONT COVER SCREEN
S82
NO
CLICKING OF SELECTION BUTTON DETECTED ?
WESTERN MUSIC MENU
JAP. MUSIC MENU
OPERATION MANUAL
(OMITTED)
S83
DISPLAY WESTERN MUSIC SEARCH/INPUT SCREEN
S84
DISPLAY JAP. MUSIC SEARCH/INPUT SCREEN
S85
NO
CLICKING OF INITIAL LETTER DETECTED ?
FOR EACH CATEGORY
YES
S86
DISPLAY MUSIC PIECE LISTING OF MUSIC PIECE NAMES HAVING SELECTED INITIAL LETTER, ALONG WITH SELECTION BUTTONS CORRE. TO MUSIC PIECES
S87
NO
CLICKING OF INITIAL LETTER DETECTED ?
FOR EACH CATEGORY
YES
S88
DISPLAY MUSIC PIECE LISTING OF MUSIC PIECE NAMES HAVING SELECTED INITIAL LETTER, ALONG WITH SELECTION BUTTONS CORRE. TO MUSIC PIECES
S89
NO
CLICKING OF SELECTION BUTTON DETECTION ?
YES
S90
ACTIVATE WWW BROWSER & TRANSMIT URL CORRE. TO CLICKED BUTTON
RETURN

FIG. 20

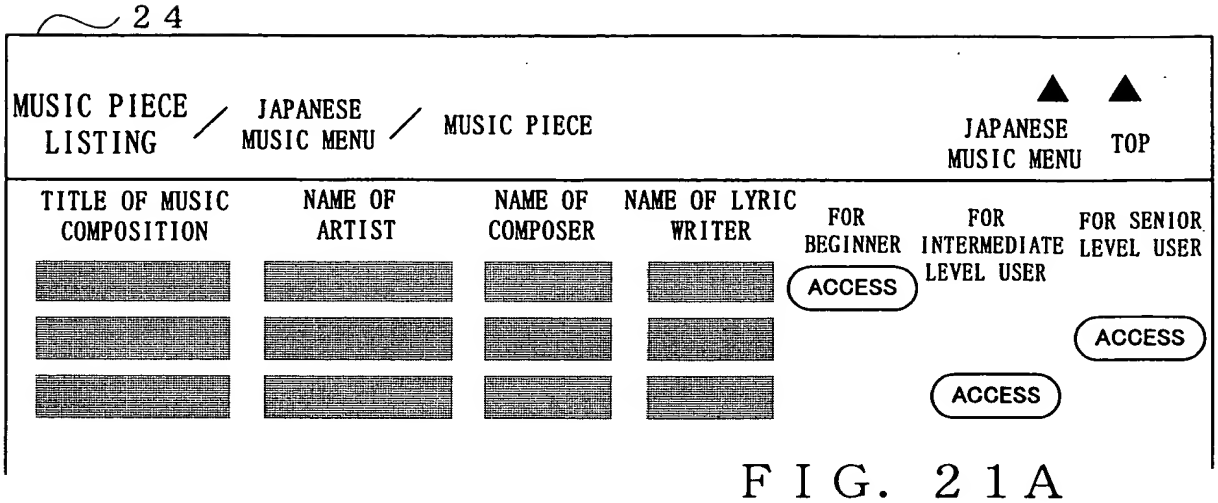


FIG. 21A

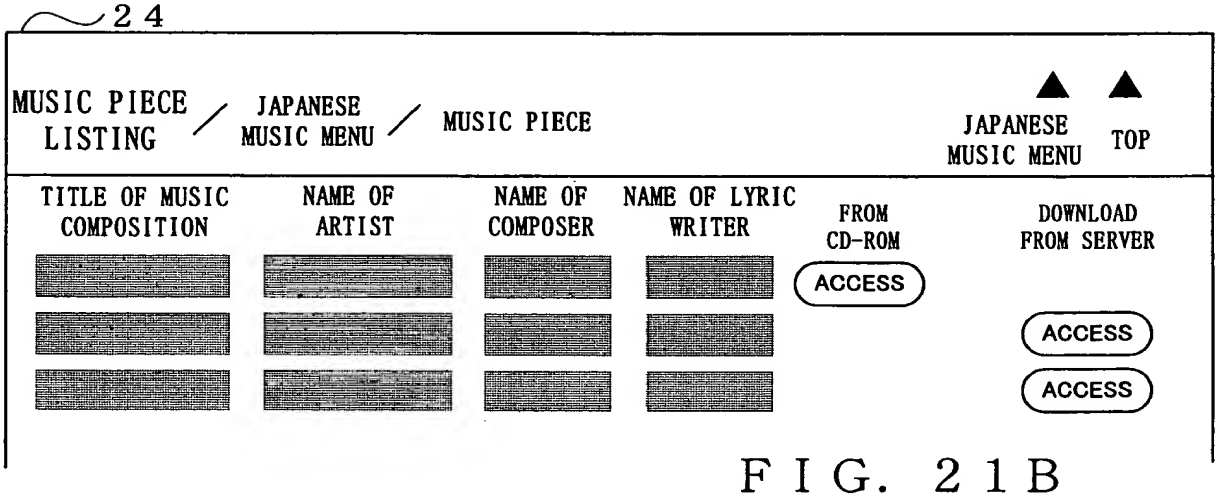


FIG. 21B

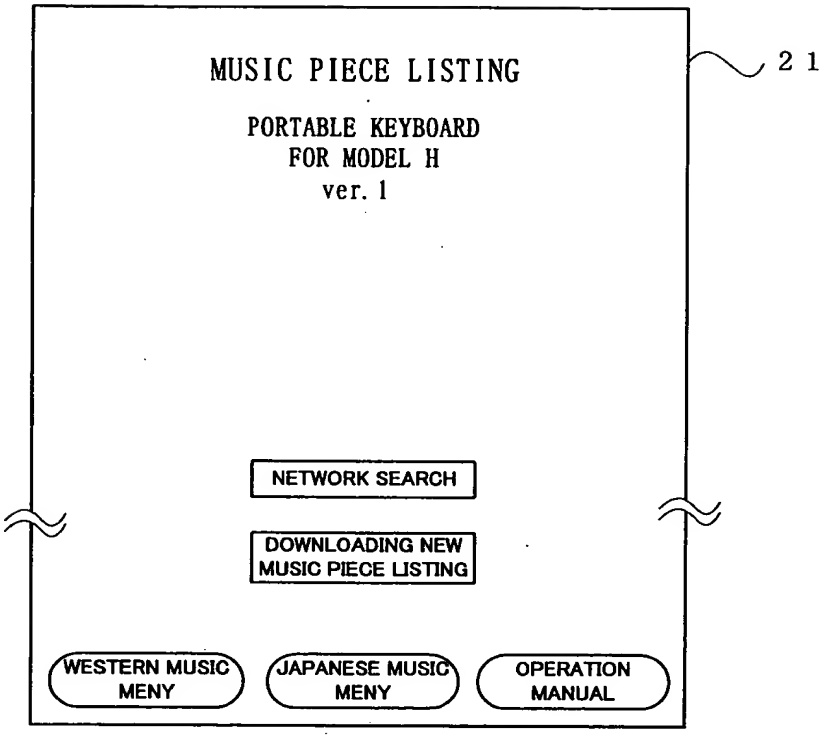
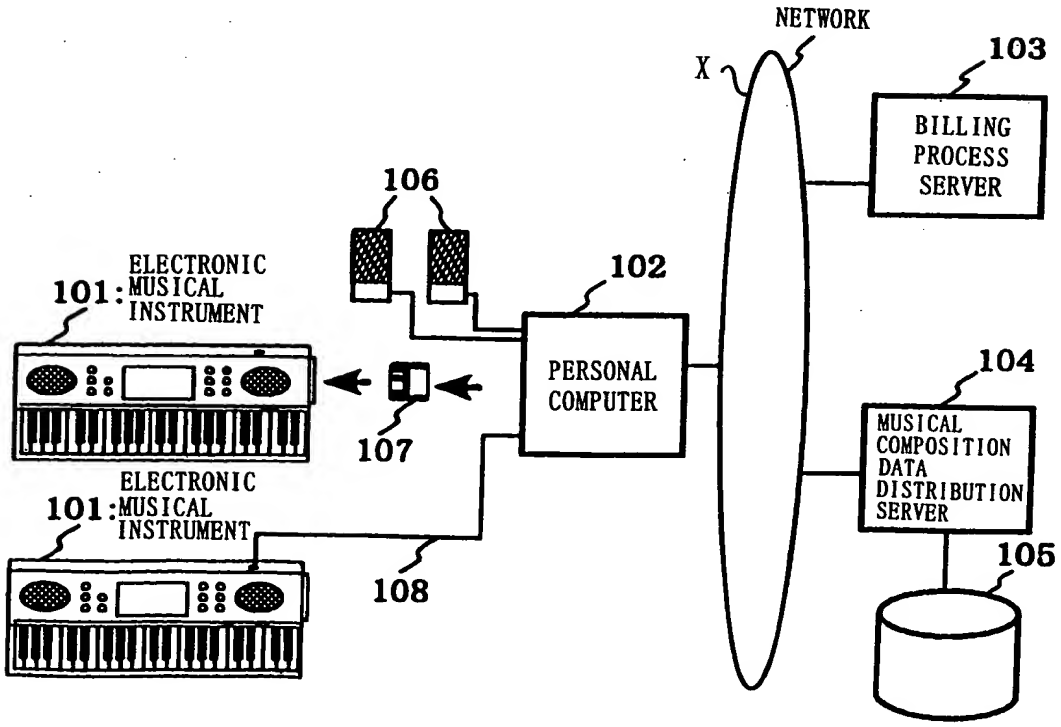


FIG. 22



(PRIOR ART)

FIG. 23